

ABSTRACT OF THE DISCLOSURE

A device is disclosed for sample introduction and for atomizing liquid samples for spectroscopic measurements, comprising a tubular furnace which has a flame-heated tube, and an arrangement for introducing a sample into the flame-heated tube. In a device of this type, a capillary is connected with the flame-heated tube via a sample inlet opening, and a pump is provided for delivering a liquid sample through the capillary, wherein the sample is partially or completely evaporated in the capillary acting as thermospray and flows into the tube in this state. In flame atomic absorption spectrometry (flame AAS), this device results in a detection capacity that is appreciably improved over the prior art, wherein particular advantages result with respect to the handling of microsample quantities.